

*On the Termination of the Nerves in the Electrical Apparatus of the Torpedo.* By M. C. ROUGET.

The author says that on examining the nervous lamina of the electrical disks of the torpedo on the ventral surface, which receives the ultimate ramifications of the pale fibres, the preparations being unaltered by any reagents, there is constantly to be observed a network formed by the division of the last branches of the pale fibres, which are ramified like stag's horns. The apparent terminations in knobs or free extremities, which may show themselves here and there in all preparations, are seen in enlarged photographs to be manifestly connected with the network by processes which elude direct observation. The solutions of continuity of the meshes which are observed in preparations treated in the fresh state with nitrate of silver or chloride of gold are not constant, and are produced by the injurious or irregular action of the reagent.

Seen on the ventral surface of the nervous lamina, the filaments which bound the meshes are smooth and have their borders regular; but when the completely isolated nervous lamina is examined on its dorsal surface, these filaments present an irregular surface, bristling with processes, which, in some cases, are seen to be arranged in regular series upon the sides of the filaments, so as to resemble the barbs of a feather. These fibrils are of the same substance as the filaments of the network from which they directly proceed; they are elementary nervous fibrils, parallel to each other, and placed perpendicular to the plane of the nervous lamina, from the ventral towards the dorsal surface; and at this end they unite to form an arcade, and constitute a last and truly terminal network, the meshes and filaments of which are scarcely one fourth of the dimensions of those of the network of the ventral surface. The two nervous networks together and the processes which unite them form a reticulated spongy layer, with meshes diminishing in size from the ventral to the dorsal surface, in which the nervous elements anastomose in arcades, and in which not a single free extremity is to be met with. — *Comptes Rendus*, August 27, 1877, p. 485.

*Prof. Haeckel's Group of the Physamariæ.*

Mr. W. Saville Kent, F.L.S., has remitted us a paper of considerable length, bearing for its title "Remarks upon Professor Haeckel's Group of the Physamariæ" and which, there not being space at disposal this month, will appear in a forthcoming number. These "Physamariæ," including, according to Haeckel's views, Mr. Carter's *Squamulina scopula*, Mr. Saville Kent concludes to be amply demonstrated by Prof. Haeckel's own drawings and descriptions to be true sponges, but at the same time the simplest representatives of their class yet discovered. In this simplicity they are shown to closely correspond with a single spherical "ciliated chamber" or "amphullaceous sac" of certain of the more complex types.